

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application.

Claims 40-63 are now present in this application. Claims 40, 48 and 56 are independent.

Claims 40, 48 and 56 have been amended. Reconsideration of this application, as amended, is respectfully requested.

Information Disclosure Citation

Applicants thank the Examiner for considering the references supplied with the Information Disclosure Statement filed March 30, 2010, and for providing Applicants with an initialed copy of the PTO-SB08 form filed therewith.

Rejections Under 35 U.S.C. § 102 and § 103

Claims 40-43 stand rejected under 35 U.S.C. § 102 as being anticipated by Aoki. Further, claims 44-46 stand rejected under 35 U.S.C. § 103 as being obvious over Aoki in view of Yang, claim 47 stands rejected under 35 U.S.C. § 103 as being obvious over Aoki in view of Mayumi, claims 48-51, 55-59 and 63 stand rejected under 35 U.S.C. § 103 as being obvious over Aoki in view of Mayumi and Ando and claims 52-54 and 60-62 stand rejected under 35 U.S.C. § 103 as being obvious over Aoki in view of Mayumi, Ando and Yang. These rejections are respectfully traversed.

Complete discussions of the Examiner's rejections are set forth in the Office Action, and are not being repeated here.

While not conceding the appropriateness of the Examiner's rejections, but merely to advance prosecution of the instant application, Applicants respectfully submit that independent claim 40 has been amended to recite a combination of elements in a stepping motor including a bracket including a first supporting unit and a third supporting unit, a housing including a first portion coupled to the third supporting unit, a second portion connected to the first portion, and a third portion integrally formed on the second portion, a stator including a first stator faced with the first portion of the housing and a second stator faced with the second portion of the housing, the stator is disposed in the housing to form an electric field, a magnet faced with the stator and configured to provide a magnetic field, a shaft having a lead screw and rotating with the magnet,

wherein the shaft is rotatably supported by the first supporting unit, a second supporting unit disposed in the third portion of the housing, and a stopper coupled to the third portion of the housing and configured to elastically support the shaft together with the second supporting unit and to prevent the second supporting unit from being removed out from the third portion of the housing. An inner surface of the stopper is contacted with an outer surface of the third portion of the housing. The stopper is overlapped with the third portion of the housing in a radial portion and the stopper is not overlapped with the first and second portion of the housing in the radial direction.

Applicants respectfully submit that this combination of elements as set forth in independent claim 40 is not disclosed or made obvious by the prior art of record, including Aoki.

In the Office Action, the Examiner identifies reference numeral 3 of Aoki as the claimed bracket, the third supporting unit and the housing. One element in the reference cannot be used to meet three different claimed elements. Moreover, the Examiner does not identify the first, second and third portions of Aoki by reference number, only generally referring to Figures 3 and 6. Applicants are not certain how Aoki discloses three housing portions and request a clearer statement of the elements in Aoki corresponding to the claimed elements if any future rejection is made, so that Applicants can be able to address the rejection more accurately.

The claim now recites that the stopper is overlapped with the third portion of the housing in a radial portion and the stopper is not overlapped with the first and second portion of the housing in the radial direction. In contrast, Aoki discloses a stopper 31 that overlaps all three sections of the housing as depicted in the figures below:

FIG. 5

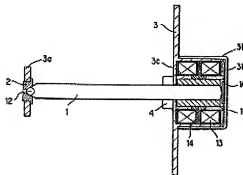
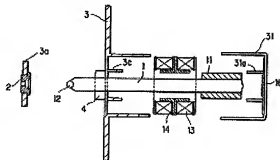


FIG. 6



The end of the stopper 31 extends all the way to the base frame 3, providing for complete overlap between the stopper and housing. All disclosed species of Aoki have a stopper completely overlapping the housing. The other prior art relied upon by the Examiner cannot be used to overcome the deficiencies of Aoki noted above.

Claims 48 and 56 have been amended in a manner similar to claim 40. Applicants respectfully submit that the combinations of elements as set forth in independent claims 40, 48 and 56 are not disclosed or made obvious by the prior art of record for the reasons explained above. Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

With regard to dependent claims 41-47, 49-55 and 57-63, Applicants submit that these claims depend, either directly or indirectly, from independent claim 40, 48 or 56 which are allowable for the reasons set forth above, and therefore claims 41-47, 49-55 and 57-63 are allowable. In addition, these claims recite further limitations which are not disclosed or made obvious by the applied prior art references. Reconsideration and allowance thereof are respectfully requested

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

In view of the above amendments, Applicants believe the pending application is in condition for allowance.

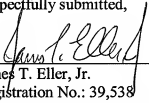
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Christopher J. McDonald, Registration No. 41,533, at the telephone number of the undersigned below to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated: August 26, 2010

Respectfully submitted,

By


James T. Eller, Jr.

Registration No.: 39,538

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road, Suite 100 East

P.O. Box 747

Falls Church, VA 22040-0747

703-205-8000